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State of Arizona

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**ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**AIR QUALITY TITLE V PERMIT**

**COMPANY NAME:** Salt River Project  
**FACILITY NAME:** Coronado Generating Station  
**PERMIT NUMBER:** 1000106  
**ORIS CODE:** 6177  
**DATE ISSUED:**  
**EXPIRY DATE:**

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**SUMMARY**

This operating permit is issued to Salt River Project (SRP), the Permittee, for operation of their Coronado Generating Station, located six miles northeast of St. Johns, Arizona, off Highway 191.

SRP Coronado supplies power through two pulverized, coal-fired, dry bottom steam electric generating units. The maximum rated generating capacity of the entire plant is approximately 912 MW. Each of the steam generating units have two electrostatic precipitators and a flue gas desulfurization system for controlling particulate matter emissions and sulfur dioxide emissions. An auxiliary boiler provides auxiliary steam during startup if main boiler steam or turbine extraction steam is unavailable. The two steam generating units commenced construction on July 25, 1974. The operating plant also consists of a main power building, coal mixing facilities, coal and ash handling facilities, ash disposal area, limestone handling equipment, process water treatment facilities, a forty-three mile railroad spur, water storage reservoirs, a 330 acre evaporation pond for non-recoverable waters, mechanically induced draft cooling towers, 500-kV and 69-kV switchyards, and water supply from satellite wellfields.

All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (A.A.C.) and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the A.A.C. All material permit conditions have been identified within the permit by a double underline. All terms and conditions of this permit are enforceable by the Administrator of the United States Environmental Protection Agency (U.S. EPA), except those terms and conditions that are specifically identified as "State Requirements".

This Class I permit supercedes all previous operating permits issued to SRP. The terms and conditions of these permits are void as of the date of issuance of this Permit. This operating permit incorporates the applicable requirements contained in the underlying construction/installation permits and does not affect those applicable requirements.

SRP is a "major source". The potential emission rates of the following pollutants are greater than 100 tons per year: (i) particulate matter, (ii) sulfur dioxide, (iii) nitrogen oxides, and (iv) carbon monoxide. SRP is subject to the Acid Rain Program of the Clean Air Act. This permit is issued in accordance with Title V of the Clean Air Act, and Title 49, Chapter 3 of the Arizona Revised Statutes. Applicable requirements for the operations at the Coronado Generating Station are listed in Attachment "C" of this permit.

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**TABLE 1: Summary of Permit Requirements**

This table summarizes certain requirements that are applicable to the Coronado Generating Station operations. It is intended for reference use only. The enforceable terms and conditions of this permit are contained in Attachments “A” through “F” of this permit

Emissions Unit	Pollutants Emitted	Control Measure	Emission Limits/Standards	Monitoring/Recordkeeping	Reporting <sup>(1)</sup>	Testing Frequency/ Methods
<b><u>POINT SOURCES</u></b>  <b>P1:</b> Unit 1 Boiler <b>P2:</b> Unit 2 Boiler  <b>Fuel:</b> Coal or Fuel Oil  <b>Combination</b> = mixture of coal and fuel oil  40 CFR 60 Subpart D	PM	Four electrostatic precipitators (ESP)	0.10 lb/million Btu	Evaluate opacity from the COMS on a 24-hr rolling average excluding periods of startup, shutdown, and malfunction. If this opacity reading exceeds 15% corrective actions shall be taken within 24 hours to improve control equipment performance and reduce opacity to at least 15%. See Section III.E.2 of Attachment “B”.	Maintain records of corrective actions taken	-Annual performance test using EPA Reference Method 5, 5B, or 17
	SO <sub>2</sub>	Four sulfur dioxide scrubbers	0.8 lb/million Btu	CEMS. See Section III.E.1 of Attachment “B”.	Part 60 and/or Part 75 requirements	-Annual performance test using EPA Reference Method 6 or 6C
	NO <sub>x</sub>	Riley Stoker turbo fired boilers with overfire air and compartmentalized burner air	0.70 lb/million Btu when burning coal	CEMS. See Section III.E.1 of Attachment “B”.	Part 60 and/or Part 75 requirements	-Annual performance test using EPA Reference Method 7 or 7E
	Visible Emissions	No controls installed	#20% opacity except for one six minute period per hour of #27%	-COMS -Type, date and time of fuel change	-Part 60 and/or Part 75 requirements -Type, date, and time of fuel change	-Annual performance test using EPA Reference Method 9

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<b>P3: Auxiliary Boiler</b>  <b>Fuel: Fuel Oil</b>  [A.A.C. R18-2-702 and 724] Auxiliary Boiler cont'd	PM	No controls installed	$E = 1.02 Q^{0.769}$	Maintain record of the contractual agreement with the liquid fuel vendor indicating: heating value, ash content, and fuel firing rate.	Any change in the contractual agreement relating to the lower heating value and sulfur content within 30 days of the change	--
	SO <sub>2</sub>	No controls installed	-1.0 lb/million Btu -Sulfur content <0.9% by weight	Maintain record of name of oil supplier, sulfur content of oil from which the shipment came, method used to determine sulfur content, density, heating value, and emission calculations performed pursuant to equation in III.F.3.b of Attachment “B”.	--	--
	NO <sub>x</sub>	No controls installed	**	--	--	--
	Visible Emissions	No controls installed	#15% opacity	-Type, date, and time of fuel change. -Opacity test result. -Dates and hours of operation	-All six-minute periods in which opacity >15% -Opacity test result -Dates and hours of operation	If fuel oil is combusted continuously for greater than 48 hrs but less than 168 hrs. then test one time for opacity. If fuel oil is combusted continuously for greater than 168 hrs then test once during each 168 hr period for opacity. EPA Reference Method 9.

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<i>Unit 1 and 2 Boilers and Auxiliary Boiler</i>  On-specification used oil [A.R.S. 49-426.6]	Arsenic (As), Cadmium (Cd), Chromium (Cr), Lead (Pb), and PCBs	No controls installed	-As # 5 ppm -Cd # 2 ppm -Cr # 10 ppm -Pb # 100 ppm -PCBs < 2 ppm -Maximum of 5% of total tank volume -#350 barrels/year	Record of: -Date of which used oil burned -Hours of usage of used oil -Quantity of fuel oil burned	Report results of tests	-Test prior to burning for chlorinated solvents using EPA Method 9077 -Test prior to burning for Arsenic, Cadmium, Chromium, and Lead using approved EPA methods
<b>P4. Coal Preparation</b>  [A.A.C. R18-2-716, 702]	PM	Eleven baghouses, wet dust suppression, enclosures, spray curtains, reasonable precautions	E = 55.0 P <sup>0.11</sup> - 40	Maintain and operate air pollution control devices in accordance with the manufacturer's specifications. Record emissions related maintenance performed on the air pollution control devices.	--	--
	Visible Emissions	Eleven baghouses, wet dust suppression, enclosures, spray curtains, reasonable precautions	#40% opacity	Weekly visual observation of the coal preparation plant when it is in operation. This shall include observation of all enclosed transfer points, open transfer points, the coal storage pile, and baghouses. See section III.G of Attachment B for further detail.	Report measures taken under Section III.G of Attachment B.	EPA Reference Method 9 when opacity\$ 40% on an instantaneous basis.
<b>P5. Limestone Preparation</b>  [A.A.C. R18-2-722, 702]	PM	Baghouse, wet dust suppression, enclosures, dust collectors, spray bars, reasonable precautions	E = 55.0 P <sup>0.11</sup> - 40	Maintain and operate air pollution control devices in accordance with the manufacturer's specifications. Record emissions related maintenance performed on the air pollution control devices.	--	--

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<i>Limestone Preparation cont' d</i>	Visible Emissions	Baghouse, wet dust suppression, enclosures, dust collectors, spray bars, reasonable precautions	#40% opacity	Weekly visual observation of the limestone preparation plant when it is in operation. This shall include observation of all enclosed transfer points, open transfer points, the limestone storage pile, and the baghouse. See section III.H of Attachment B for further detail.	Report measures taken under Section III.H of Attachment B.	EPA Reference Method 9 when opacity\$ 40% on an instantaneous basis.
<b>P6. Fly Ash Handling</b>  [A.A.C. R18-2-730, 702, 610]	PM	Ten baghouses, mixer unloader, reasonable precautions	$E = 55.0 P^{0.11} - 40$	Maintain and operate air pollution control devices in accordance with the manufacturer' s specifications. Record emissions related maintenance performed on the air pollution control devices.	--	--
	Visible Emissions	Ten baghouses, mixer unloader, reasonable precautions	#40% opacity	Weekly visual observation of the fly ash handling plant when it is in operation. This shall include observation of all enclosed transfer points, open transfer points and baghouses. See section III.I of Attachment B for further detail.	Report measures taken under Section III.I of Attachment B.	EPA Reference Method 9 when opacity\$ 40% on an instantaneous basis.
<b>P7. Cooling Towers</b>  [A.A.C. R18-2-730, 702]	PM	No controls installed	$E = 55.0 P^{0.11} - 40$	--	--	--
	Visible Emissions	No controls installed	#40% opacity			

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<b><u>FUGITIVE SOURCES</u></b>						
<b>F1. Non-Point sources</b>						
<i>a. Driveways, Parking lots, and vacant lots</i> [A.A.C. R18-2-604.B]	Visible Emissions	Reasonable precautions such as dust suppressant, adhesive soil stabilizer, paving, or barring access	#40% opacity	Type of control used.	--	--
<i>b. Open area construction, reparation, etc. and earth excavation</i> [A.A.C. R18-2-604.A]	Visible Emissions	Reasonable precautions such as dust suppressant, adhesive soil stabilizer, paving, covering, landscaping, detouring, barring access or wetting agent	#40% opacity	Date and type of activity. Type of control used.	--	--
<i>c. Roadway construction, repair or reconstruction</i> [A.A.C. R18-2-605.A]	Visible Emissions	Reasonable precautions such as dust suppressant, temporary paving, detouring, or wetting agent	#40% opacity	Date and type of activity. Type of control used.	--	--
<i>d. Material transportation</i> [A.A.C. R18-2-605.B]	Visible Emissions	Reasonable precautions such as covering, dust suppressant or wetting agent	#40% opacity	Date and type of activity. Type of control used.	--	--
<i>e. Material Handling</i> [A.A.C. R18-2-606]	Visible Emissions	Reasonable precautions such as covering, dust suppressants, or wetting agents	#40% opacity	Date and type of activity. Type of control used.	--	--

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<i>f. Storage Piles</i> [A.A.C. R18-2-607.A]	Visible Emissions	Reasonable precautions such as covering, dust suppressant, chemical stabilization, or wetting agents	#40% opacity	Date and type of activity. Type of control used.	--	--
<i>g. Stacking and reclaiming machinery at storage piles</i> [A.A.C. R18-2-607.B]	Visible Emissions	Reasonable precautions such as minimize fall, dust suppressant, spray bars or wetting agents	#40% opacity	Date and type of activity. Type of control used.	--	--
<i>h. Cleaning of site and roadway</i> [A.A.C. R18-2-804.B]	Visible Emissions	Reasonable precautions such as wetting agent or dust suppressant	**	Date and type of activity. Type of control used.	--	--
<b>F2. Abrasive Blasting</b> [A.A.C. R18-2-726 and 702.B]	Visible Emissions	Wet blasting; enclosure with dust collection device.	#40% opacity	Date and duration of activity. Type of control used.	--	--
<b>F3. Spray Painting</b> [R18-2-702.B, 727, SIP R9-3-527.C]	VOC	Enclosures containing at least 96% of overspray except for architectural coating and spray painting, dispose of <1.5 gallons	**	-Date and duration of activity. -Type of control used. -MSDS for all paints/solvents used	--	--
	Visible Emissions	--	#40% opacity	--	--	--
<b>F4. Mobile Sources</b> <i>a. Off road machinery</i> [A.A.C. R18-2-802]	Visible Emissions	Not required	#40% opacity for any period greater than 10 consecutive minutes	Records of emissions related maintenance activities performed on off-road machinery stationed at the facility	--	--



Emissions Unit	Pollutants Emitted	Control Measure	Emission Limits/Standards	Monitoring/Recordkeeping	Reporting <sup>(1)</sup>	Testing Frequency/ Methods
<i>b. Roadway and site cleaning machinery</i> [A.A.C. R18-2-804.A]	Visible Emissions	Not required	#40% opacity for any period greater than 10 consecutive minutes	Records of emissions related maintenance activities performed on roadway and site cleaning machinery stationed at the facility	--	--
<b>F5.</b> <i>Demolition/Renovation</i> [A.A.C. R18-2-1101.A.8]	Asbestos	As required by rule	As required by rule	Required paperwork on file	--	--
<b>F6.</b> <i>Nonvehicle Air Conditioner Maintenance and/or Services</i> [40 CFR 82, Subpart F]	Ozone depleting substances	As required by rule	As required by rule	Required paperwork on file	--	--

Note: \*\* No limits established

-- Not required

<sup>(1)</sup> Semiannual Compliance Certifications required for all permitted equipment

<sup>(a)</sup> Table 1 summarizes certain of the requirements applicable to Coronado Generating Station operations. It is intended for reference use only. The enforceable terms and conditions of this permit are contained in Attachments A through F of this permit.

## **ATTACHMENT "A": GENERAL PROVISIONS**

### **Air Quality Control Permit No. 1000106 For *SALT RIVER PROJECT - Coronado Generating Station***

#### **I. PERMIT EXPIRATION AND RENEWAL**

[A.R.S. § 49-426.F, A.A.C. R18-2-304.C.2 and 306.A.1]

- A. This permit is valid for a period of five years from the date of issuance of the permit.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months prior to the date of permit expiration.

#### **II. COMPLIANCE WITH PERMIT CONDITIONS**

[A.A.C. R18-2-306.A.8.a and b, A.R.S. § 49-463, and A.R.S. § 49-464]

- A. The Permittee shall comply with all the conditions contained in Attachments "A" through "F" of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. Need to halt or reduce activity not a defense. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### **III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE**

[A.A.C. R18-2-306.A.8.c, 321.A]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances:
  - 1. Additional applicable requirements under the Act become applicable to the Class I source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to R18-2-322(B). Any permit revision required pursuant to this subparagraph shall comply with provisions in R18-2-322 for permit renewal and shall reset the five year permit term.
  - 2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.
  - 3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or

conditions of the permit.

4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under paragraph 1 above, affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in paragraph III.B.1 of this Attachment shall not result in a resetting of the five year permit term.

#### **IV. POSTING OF PERMIT**

[A.A.C. R18-2-315]

- A. Permittee shall post such permit, or a certificate of permit issuance where the facility is located in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:
  1. Current permit number.
  2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on the site.

#### **V. FEE PAYMENT**

[A.A.C. R18-2-326, 306.A.9]

Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and A.A.C. R18-2-326.

#### **VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE**

[A.A.C. R18-2-327]

- A. Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

#### **VII. COMPLIANCE CERTIFICATION**

- A. Permittee shall submit a compliance certification to the Director twice each year, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15th, and shall report the compliance status of the source during the period between October 1st of the previous year, and March 31st of the current year. The second certification shall be submitted no later than November 15th, and shall report the compliance status of the source during the period between April 1st and September 30th of the current year. The initial compliance certification shall reflect compliance status of the source beginning the date of permit issuance.

[A.A.C. R18-2-309.2.a]

The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;  
[A.A.C. R18-2-309.2.c.i]
  2. Compliance status with each applicable requirement;  
[A.A.C. R18-2-309.2.c.ii]
  3. Whether compliance was continuous or intermittent;  
[A.A.C. R18-2-309.2.c.iii]
  4. Method(s) used for determining the compliance status of the source, currently and over the reporting period;  
[A.A.C. R18-2-309.2.c.iv]
  5. A progress report on all outstanding compliance schedules submitted pursuant to Section XII.D of this Attachment. Progress reports submitted with compliance certifications satisfy the reporting requirements of A.A.C. R18-2-309.5.d.  
[A.A.C. R18-2-309.5.d]
- B. A copy of all compliance certification for Class I permits shall also be submitted to the EPA Administrator.  
[A.A.C. R18-2-309.2.d]

**VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS** [A.A.C. R18-2-309.3]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**IX. INSPECTION AND ENTRY** [A.A.C. R18-2-309.4]

The Permittee shall allow the Director or the authorized representative of the Director upon presentation of proper credentials to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

**X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD** [A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

**XI. ACCIDENTAL RELEASE PROGRAM** [40 CFR 68]

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the timeline specified in 40 CFR Part 68.

## **XII. REPORTING OF EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCIES**

### **A. EXCESS EMISSIONS REPORTING**

[A.A.C R18-2-310.C]

1. Excess emissions, as defined in A.A.C. R18-2-101.37, shall be reported as follows:
  - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
    - (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from paragraph b. of this subsection.
    - (2) Detailed written notification within 72 hours of the notification pursuant to subparagraph (1) of this paragraph.
  - b. Report shall contain the following information:
    - (1) Identity of each stack or other emission point where the excess emissions occurred.
    - (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
    - (3) Date, time and duration or expected duration of the excess emissions.
    - (4) Identity of the equipment from which the excess emissions emanated.
    - (5) Nature and cause of such emissions.
    - (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
    - (7) Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction of Unit 1 or 2, the report shall contain a list of the steps taken to comply with the permit procedures.
2. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsection A.1.a.(2) of this Section. [A.A.C. R18-2-310.D]
3. It shall be the burden of the Permittee to demonstrate, through submission of the data and information required by Section XII.A of Attachment "A", that all reasonable and practicable

measures within the Permittee's control were implemented to prevent the occurrence of excess emissions. [A.A.C. R18-2-310.B]

**B. PERMIT DEVIATIONS REPORTING**

[A.A.C. R18-2-306.A.5]

1. A deviation means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined through observation or through review of data obtained from any testing, monitoring, or recordkeeping established in this permit. For a situation lasting more than 24 hours which constitutes a violation, each 24 hour period is considered a separate deviation. Included in the meaning are any of the following:
  - a. A situation where emissions exceeded an emission limitation or standard;
  - b. A situation where process or control device parameter values indicate that an emission limitation or standard has not been met;
  - c. A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.
2. Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time the deviation occurred.
3. All instances of deviations from permit requirements shall be clearly identified in the required semiannual monitoring report specified in Attachment "B", Section III.B, and shall be certified by the responsible official. [A.A.C. R18-2-306.A.5.a]

**C. EMERGENCY PROVISION REPORTING**

[A.A.C. R18-2-306.E]

1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
  - a. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of paragraph (c) of this subsection are met.
  - b. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
    - (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
    - (2) The permitted facility was at the time being properly operated;

- (3) During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
    - (4) The permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
  - c. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - d. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
- D. For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated. [ARS §49-426.I.5]

### **XIII. RECORD KEEPING REQUIREMENTS**

[A.A.C. R18-2-306.A.4]

- A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:
  - 1. The date, place as defined in the permit, and time of sampling or measurements;
  - 2. The date(s) analyses were performed;
  - 3. The name of the company or entity that performed the analyses;
  - 4. A description of the analytical techniques or methods used;
  - 5. The results of such analyses; and
  - 6. The operating conditions as existing at the time of sampling or measurement.
- B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

### **XIV. REPORTING REQUIREMENTS**

[A.A.C. R18-2-306.A.5.a]

Permittee shall submit the following reports:

- A. Compliance certifications in accordance with Section VII of Attachment "A".

- B. Reports of excess emissions, permit deviations, and emergencies in accordance with Section XII of Attachment “A”.
- C. Other reports required by Section III of Attachment “B”.

**XV. DUTY TO PROVIDE INFORMATION**

[A.A.C. R18-2-304.G and 306.A.8.e]

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

**XVI. PERMIT AMENDMENT OR REVISION**

[A.A.C. R18-2-318, 319 and 320]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVII, as follows:

- A. Administrative Permit Amendment (A.A.C. R18-2-318);
- B. Minor Permit Revision (A.A.C. R18-2-319);
- C. Significant Permit Revision (A.A.C. R18-2-320).

The applicability and requirements for such action are defined in the above referenced regulations.

**XVII. FACILITY CHANGE WITHOUT PERMIT REVISION**

[A.A.C. R18-2-317]

- A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:
  - 1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).
  - 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.
  - 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.
  - 4. The changes satisfy all requirements for a minor permit revision under R18-2-319(A).
  - 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.



- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of subsections (A) and (C) of this Section.
- C. For each such change under subsections A and B of this Section, a written notice by certified mail or hand delivery shall be received by the Director and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible. Each notification shall include:
  - 1. When the proposed change will occur.
  - 2. A description of each such change.
  - 3. Any change in emissions of regulated air pollutants.
  - 4. The pollutants emitted subject to the emissions trade, if any.
  - 5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.
  - 6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.
  - 7. Any permit term or condition that is no longer applicable as a result of the change.

#### **XVIII. PERFORMANCE TESTING REQUIREMENTS**

[A.A.C. R18-2-312]

##### **A. Operational Conditions During Performance Testing**

Performance tests shall be conducted during operation at the full load of each unit under representative operational conditions unless other conditions are required by the applicable test method or in this permit.

With prior written approval from the Director, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

##### **B. Performance tests shall be conducted and data reduced in accordance with the test method and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.**

##### **C. Performance Test Plan**

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with the Arizona Testing Manual. This test plan must include the following:

- 1. test duration;
- 2. test location(s);
- 3. test method(s); and

4. source operation and other parameters that may affect test results.

**D. Stack Sampling Facilities**

Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platforms;
3. Safe access to sampling platforms; and
4. Utilities for sampling and testing equipment.

**E. Interpretation of Final Results**

Each performance test shall consist of three separate runs using the required test method. Each run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the Permittee's control and which may invalidate the run, compliance may, upon the Director's approval, be determined using the arithmetic mean of the other two runs. If the Director, or Director's designee, is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation which demonstrates good cause must be submitted.

**F. Report of Final Test Results**

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

**XIX. PROPERTY RIGHTS**

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

**XX. SEVERABILITY CLAUSE**

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

**XXI. PERMIT SHIELD**

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XVI.B of this Attachment and Section XVII of this Attachment.

**XXII. ACID RAIN**

- A. When provisions or requirements of the regulations incorporated pursuant to A.A.C. R18-2-333.A (Acid Rain) conflict with any of the applicable requirements, the regulations incorporated by A.A.C. R18-2-

333.A (Acid Rain) shall apply and take precedence.

[A.A.C. R18-2-333]

- B. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. [A.A.C. R18-2-306.A.6.a]
- C. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. [A.A.C. R18-2-306.A.6.b]
- D. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act. [A.A.C. R18-2-306.A.6.c]
- E. All of the following are prohibited:
  - 1. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or the operators of the unit or the designated representative of the owners or the operators as of the applicable allowance transfer deadline;
  - 2. Exceedances of applicable emission rates;
  - 3. The use of any allowance prior to the year for which it was allocated; and
  - 4. Contravention of any other provision of the permit.

[A.A.C. R18-2-306.A.6.d]

## ATTACHMENT "B": SPECIFIC CONDITIONS

### Air Quality Control Permit No. 1000106 For *SALT RIVER PROJECT - Coronado Generating Station*

#### I. EMISSION LIMITS/ STANDARDS

##### A. Unit 1 and Unit 2 Boilers

###### 1. Opacity Standard

The opacity of emissions from the stack of each unit shall not be greater than 20 percent except for periods of startup, shutdown, or malfunction as defined below and for one six-minute period per hour of not more than 27 percent opacity. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for the purposes of determining compliance with opacity standards.

[40 CFR 60.42(a)(2), 60.11(c), 60.11(e)(1) and A.A.C. R18-2-331.A.3.d]

###### a. Startup

Startup means the setting into operation of Coronado Generating Station (CGS) Unit 1 or Unit 2. The startup sequence begins with the start of CGS Unit 1 or Unit 2 induced draft fans. The electrostatic precipitator (ESP) of the respective unit shall be placed in service as soon as practicable after startup, but not until the ESP minimum inlet gas temperature remains at 550 degrees Fahrenheit for a period of one-half hour. Startup ends when the ESP minimum inlet gas temperature remains at 550 degrees Fahrenheit for a period of one-half hour.

###### b. Shutdown

Shutdown means with the cessation of operation of Coronado Generating Station (CGS) Unit 1 or Unit 2. During periods of shutdown, the electrostatic precipitators (ESP) for the affected unit(s) shall remain in service until coal fires in the boiler are out or the minimum inlet temperature to the ESP falls below 550 degrees Fahrenheit.

###### c. Malfunction

Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment or failure of a process to operate in a normal and usual manner, but does not include failures that are caused by poor maintenance, careless operation or any other upset condition or equipment breakdown which could have been prevented by the exercise of reasonable care.

###### 2. Particulate Matter Standard

Permittee shall not cause to be discharged into the atmosphere from the stack of each unit any gases which contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel.

[40 CFR 60.42(a)(1)]

3. Sulfur Dioxide Standard

a. Coal

Permittee shall not cause to be discharged into the atmosphere from the stack of each unit any gases which contain sulfur dioxide in excess of 340 nanograms per joule heat input (0.8 pounds per million Btu) derived from coal. [A.A.C. R18-2-903.1]

b. Fuel Oil and Used Fuel Oil

Permittee shall not cause to be discharged into the atmosphere from the stack of each unit any gases which contain sulfur dioxide in excess of 340 nanograms per joule heat input (0.8 pounds per million Btu) derived from used fuel oil. [40 CFR 60.43(a)(1)]

c. Combination Fuel

Permittee shall not cause to be discharged into the atmosphere from the stack of each unit any gases which contain sulfur dioxide in excess of 340 nanograms per joule heat input (0.8 pounds per million Btu) derived from coal and fuel oil. [A.A.C. R18-2-306.A.2]

d. Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels. [40 CFR 60.43(c)]

4. Nitrogen Oxide Standard

a. Coal

Permittee shall not cause to be discharged into the atmosphere from the stack of each unit any gases which contain nitrogen oxides, expressed as NO<sub>2</sub> in excess of 300 nanograms per joule heat input (0.70 lb per million Btu) derived from coal. [40 CFR 60.44(a)(3)]

b. Fuel Oil and Used Fuel Oil

Permittee shall not cause to be discharged into the atmosphere from the stack of each unit any gases which contain nitrogen oxides, expressed as NO<sub>2</sub> in excess of 129 nanograms per joule heat input (0.30 lb per million Btu) derived from used fuel oil. [40 CFR 60.44(a)(2)]

c. Combination Fuels

When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula: [40 CFR 60.44(b)]

$$PS_{NOX} = \frac{w(260) + x(86) + y(130) + z(300)}{w+x+y+z}$$

Where:

$PS_{NOX}$  = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

w = is the percentage of total heat input derived from lignite;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel; and

z = is the percentage of total heat input derived from solid fossil fuel (except lignite).

5. Fuel Limitation

a. Permittee shall burn only the following as fuel in the units:

- (1) Coal;
- (2) Fuel Oil (Number 2, used fuel oil subject to Section V of this Attachment);
- (3) Co-firing of coal and Number 2 fuel oil; and
- (4) Co-firing of coal and used fuel oil subject to Section V of this Attachment.

[Operating Permit #0365-95, Attachment B, Condition VII.A]

**B. Auxiliary Boiler**

1. Opacity Standard

Permittee shall not cause, allow or permit to be emitted into the atmosphere from the auxiliary boiler, smoke which exceeds 15 percent opacity measured in accordance with EPA Reference Method 9.

[A.A.C. R18-2-724.J]

2. Particulate Matter Standard

Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from the auxiliary boiler in excess of the amount calculated by the following equation:

[A.A.C. R18-2-724.C.1]

$$E = 1.02 Q^{0.769}$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

3. Sulfur Dioxide Standard

Permittee shall not cause, allow, or permit emission of more than 1.0 pounds of sulfur dioxide per million Btu heat input.

[A.A.C. R18-2-724.E]

4. Fuel Limitation

a. Permittee shall not use high sulfur oil (fuel sulfur content  $\geq$  0.9% by weight) as a fuel unless the Permittee demonstrates to the satisfaction of the Director that sufficient quantities of low sulfur oil are not available for use by the source and that it has adequate facilities and contingency plans to insure that the sulfur dioxide ambient air quality standards set forth in A.A.C. R18-2-202 will not be violated.

- b. Permittee shall burn only Number 2 fuel oil and used oil in the auxiliary boiler.  
[Operating Permit #0365-95, Attachment B, Condition VII.A]

5. Definition of Heat Input

- a. For the purposes of conditions I.B.2 and I.B.3 of this Attachment, “heat input” is defined as the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat content of solid fuel shall be determined in accordance with A.A.C. R18-2-311. Compliance tests shall be conducted during operation at the nominal rated capacity of each unit.  
[A.A.C. R18-2-724.B]

- b. The total heat input from the burning of all fuels shall be computed as follows:

$$Total\ Heat\ Input = \sum_{j=1}^n \sum_{i=1}^k (NHV_{ij}) \times (U_{ij})$$

Where:

- NHV<sub>i</sub> = Net heating value of each fuel “i” at standard temperature and pressure; and  
U<sub>i</sub> = Fuel firing rate of each fuel “i”.

**C. Coal Handling**

1. Opacity Standard

Permittee shall not cause, allow or permit to be emitted any emissions from the coal preparation plant into the atmosphere in excess of 40 percent opacity as measured in accordance with EPA Reference Method 9.  
[A.A.C. R18-2-610 and 702.B]

2. Particulate Matter Standard

Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any coal preparation operation in total quantities in excess of the amounts calculated by the following equation:

[A.A.C. R18-2-716.B and D]

$$E = 55.0 P^{0.11} - 40$$

Where:

- E = the maximum allowable particulate emissions rate in pounds-mass per hour.  
P = the process weight rate in tons-mass per hour. The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

**D. Limestone Handling**

1. Opacity Standard

Permittee shall not cause, allow or permit to be emitted into the atmosphere from any lime handling operation in excess of 40 percent opacity as measured in accordance with EPA Reference Method 9. [A.A.C. R18-2-610 and 702.B]

2. Particulate Matter Standard

Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any limestone preparation operation in total quantities in excess of the amounts calculated by the following equation:

[A.A.C. R18-2-722.B.2]

$$E = 55.0 P^{0.11} - 40$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour. The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

**E. Fly Ash Handling**

1. Opacity Standard

Permittee shall not cause, allow or permit to be emitted any emissions into the atmosphere from the fly ash handling operation in excess of 40 percent opacity as measured in accordance with EPA Reference Method 9. [A.A.C. R18-2-610 and 702.B]

2. Particulate Matter Standard

Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any fly ash handling operation in total quantities in excess of the amounts calculated by the following equation:

[A.A.C. R18-2-730.A.1.b]

$$E = 55.0 P^{0.11} - 40$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour. The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

**F. Cooling Towers 1 and 2**

1. Opacity Standard

Permittee shall not cause, allow or permit to be emitted into the atmosphere any plume or effluent the opacity of which exceeds 40 percent as measured in accordance with EPA Reference Method 9. Where the presence of uncombined water is the only reason for the exceedance, such exceedance shall not constitute a violation. [A.A.C. R18-2-702.B]

2. Particulate Matter Standard



Permittee shall not discharge particulate matter into the atmosphere in any one hour from any unclassified process source in total quantities in excess of the amounts calculated by the following equation:

[A.A.C. R18-2-730.A.1]

$$E = 55.0 P^{0.11} - 40$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour. The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

3. Permittee shall not emit gaseous or odorous materials from equipment, operations or premises in such quantities or concentrations as to cause air pollution. [A.A.C. R18-2-730.D]
4. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the Permittee thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property. [A.A.C. R18-2-730.G]

#### **G. Non-Point Sources**

1. Open Areas, Roadways & Streets, Storage Piles, and Material Handling
  - a. Permittee shall not cause, allow or permit visible emissions from open areas, roadways and streets, storage piles or material handling in excess of 40 percent opacity measured in accordance with the Arizona Testing Manual, Reference Method 9. [A.A.C. R18-2-610]
  - b. Permittee shall employ one or more of the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:
    - (1) Use approved dust suppressants, adhesive soil stabilizer, paving, covering, detouring, or wetting agents on, or bar access to open areas during construction operations, repair operations, demolition activities, clearing operations, and leveling operations, or when any earth is moved or excavated; [A.A.C. R18-2-604.A]
    - (2) Use approved dust suppressants, adhesive soil stabilizer, or paving on, or bar access to driveways, parking areas, and vacant lots where motor vehicular activity occurs; [A.A.C. R18-2-604.A and B]
    - (3) Use approved dust suppressants, temporary paving, detouring or wetting agents when a roadway is repaired, constructed, or reconstructed; [A.A.C. R18-2-605.A]
    - (4) Use dust suppressants, wetting agents, or cover the load adequately when transporting material likely to give rise to airborne dust; [A.A.C. R18-2-605.B]

- (5) Use spray bars, hoods, wetting agents, dust suppressants, or cover when crushing, screening, handling, transporting, or conveying material that is likely to give rise to airborne dust; [A.A.C. R18-2-606]
- (6) Adequately cover, or use wetting agents, chemical stabilization, or dust suppressants when stacking, piling, or otherwise storing organic or inorganic dust producing material; [A.A.C. R18-2-607.A]
- (7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material and with the use of spray bars and wetting agents; [A.A.C. R18-2-607.B]
- (8) Use wetting agents or dust suppressants before the cleaning of site, roadway, or alley. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means; or [A.A.C. R18-2-804.B]
- (9) Any other method as proposed by the Permittee and approved by the Director.

## 2. Open Burning

Except as provided in A.A.C. R18-2-602.C(1), C(3), and C(4), and except when permitted to do so by either ADEQ or the local officer delegated the authority for issuance of open burning permits the Permittee shall not conduct open burning. [A.A.C. R18-2-602]

## H. Other Periodic Activities

### 1. Abrasive Blasting

- a. The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include: [A.A.C. R18-2-726]
  - (1) wet blasting;
  - (2) effective enclosures with necessary dust collecting equipment; or
  - (3) any other method as approved by the Director.
- b. Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 40 percent opacity as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B]

### 2. Use of Paints

While performing spray painting operations the Permittee shall comply with the following requirements:

- a. The Permittee shall not conduct any spray painting operation without minimizing organic solvent emissions. Such operations other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray. [A.A.C. R18-2-727.A]
- b. The Permittee shall not either:

(1) Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

(2) Thin or dilute any architectural coating with a photochemically reactive solvent.  
[A.A.C. R18-2-727.B]

c. For the purposes of part b. and e. of this condition, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in paragraphs (1) through (3) of this subsection, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

(1) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation - hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: five percent

(2) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: eight percent

(3) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent

[A.A.C. R18-2-727.C]

d. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups or organic compounds described in subsection c(1) through c(3) of this condition, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

[A.A.C. R18-2-727.D]

e. Permittee shall not dispose by evaporation more than 1.5 gallons of photochemically reactive solvent in any one day.

[SIP Provision R9-3-527.C]

f. Visible emissions from spray painting operations shall not have an opacity of greater than 40 percent, as measured in accordance with EPA Reference Method 9.

[A.A.C. R18-2-702.B]

### 3. Vapor Extractors

Materials including solvents or other volatile compounds shall be processed, stored, used and transported in such a manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices, or equipment shall be mandatory.

[A.A.C. R18-2-730.F]

### 4. Landfill Operations

Permittee shall not emit gaseous or odorous materials from the landfill operations in such quantities or concentrations to cause air pollution.

[A.A.C. R18-2-730.D]

### 5. Mobile Sources

a. Classification

The requirements of this condition are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or are agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.84. [A.A.C. R18-2-801]

b. Roadway and Site Cleaning Machinery

Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [A.A.C. R18-2-804.A]

6. Demolition/Renovation

Permittee shall comply with the applicable requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos). [A.A.C. R18-2-1101.A.8]

7. Nonvehicle Air Conditioner Maintenance and/or Services

Permittee shall comply with the applicable requirements of 40 CFR 82 Subpart F (Protection of Stratospheric Ozone - Recycling and Emissions Reduction). [40 CFR 82, Subpart F]

## II. AIR POLLUTION CONTROL EQUIPMENT

### A. Unit 1 and Unit 2 Boilers

1. Particulate Matter

At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate the four Joy Western electrostatic precipitators (2 per boiler) in a manner consistent with good air pollution control practices for minimizing emissions. [40 CFR 60.11(d) and A.A.C. R18-2-331]

2. Sulfur Dioxide

At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate the Pullman Kellog sulfur dioxide scrubber in a manner consistent with good air pollution control practices for minimizing emissions. [40 CFR 60.11(d) and A.A.C. R18-2-331]

3. Nitrogen Oxide

At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate the Riley Stoker turbo fired boilers to control the nitrogen oxide emissions as guaranteed by Riley Stoker. [A.A.C. R18-2-306.A.2 and Operating Permit #0365-95, Attachment B, Condition IX.A.3]

## **B. Coal Handling**

When the coal handling system is operational, Permittee shall maintain and operate the eleven Johnson March baghouses used to capture particulate matter emissions associated with coal handling in accordance with manufacturer's specification and in a manner consistent with good air pollution control practices. Wet dust suppression shall be maintained and operated at the rotary car dumper during train unloading, at conveyor transfer points in the yard area, and at the stacking-reclaiming area.

[A.A.C. R18-2-306.A.2 and 331]

## **C. Limestone Preparation**

1. When the limestone handling system is operational, Permittee shall maintain and operate the Johnson March baghouse used to capture particulate matter emissions associated with limestone preparation in accordance with manufacturer's specification and in a manner consistent with good air pollution control practices.

[A.A.C. R18-2-306.A.2 and 331]

2. Spray bar pollution controls shall be utilized in accordance with "EPA Control of Air Emissions From Process Operations In The Rock Crushing Industry" (EPA 340/1-79-002), "Wet Suppression System" (pages 15-34, amended as of January 1979 (and no future amendments or editions)), as incorporated herein by reference and on file with the Office of the Secretary of State, with placement of spray bars and nozzles as required by the Director to minimize air pollution.

[A.A.C. R18-2-722.D]

## **D. Fly Ash Handling**

When the fly ash handling system is operational, Permittee shall maintain and operate four of the ten Flex-Kleen baghouses, the Johnson March baghouse, water spray header, pugmill and the mixer unloader used to minimize particulate matter emissions associated with fly ash handling in accordance with manufacturer's specification and in a manner consistent with good air pollution control practices.

[A.A.C. R18-2-306.A.2 and 331]

## **III. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

A. Within 180 days of issuance of this permit the owners or operators shall have on staff a person that is certified in EPA Reference Method 9 opacity observations.

[A.A.C. R18-2-306.A.3]

B. At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit reports of all monitoring activities required by Section III of this Attachment performed in the same six month period as applies to the compliance certification period.

[A.A.C. R18-2-306.A.5.a]

C. Permittee shall log in ink or in an electronic format a record of any change in fuel type including:

[A.A.C. R18-2-306.A.3.b]

1. Type of fuel change;
2. Date of the fuel change; and
3. Time of the fuel change.

D. Permittee shall maintain a log of all adjustments, replacements, and maintenance performed on all air pollution control equipment.

[Operating Permit #0365-95, Attachment B, Condition VIII.B]

## **E. Unit 1 and Unit 2 Boilers**

### **1. Monitoring for Opacity, SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>**

- a. Permittee shall calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and carbon dioxide. [40 CFR 60.45(a)]
- b. The continuous emission monitoring systems for SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> shall meet the following requirements:
  - (1) 40 CFR Part 75, Appendix A, Specification and Test Procedures
    - (a) Installation and measurement location
    - (b) Equipment specifications
    - (c) Performance specifications
    - (d) Data acquisition and handling systems
    - (e) Calibration gas
    - (f) Certifications tests and procedures
    - (g) Calculations
  - (2) 40 CFR Part 75, Appendix B, Quality Assurance and Quality Control Procedure
    - (a) Quality control program
    - (b) Frequency of testing
  - (3) Data Reduction

Permittee shall comply with the data reduction requirements of 40 CFR Part 75.10(d)(1).
- c. Permittee shall comply with all the applicable recordkeeping and reporting requirements of 40 CFR Part 75 Subparts F and G respectively.
- d. Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this section recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports and records. [40 CFR 60.7(f)]
- e. The continuous opacity monitoring system shall meet the following requirements:
  - (1) 40 CFR 60, Appendix B, Performance Specification 1, "Specification and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources"
    - (a) Apparatus
    - (b) Installation Specifications
    - (c) Design and Performance Specifications
    - (d) Design Specifications Verification Procedure
    - (e) Performance Specifications Verification Procedure

(f) Equations [40 CFR 60.13(a)]

(2) The following quality assurance requirements:

(a) Calibration Checks

Permittee shall check the zero and span calibration drifts at least once daily in accordance with a written procedure.

[40 CFR 60.13(d)(1) and 40 CFR 60, Appendix B, PS1, 5.2]

(b) Zero and Span Drift Adjustments

i) The zero and span shall, as a minimum, be adjusted whenever the 24-hr zero drift or 24-hr span drift exceeds 4% opacity.

[40 CFR 60.13(d)(1)]

ii) The system shall allow for the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified.

[40 CFR 60.13(d)(1)]

iii) The optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero adjustments.

[40 CFR 60.13(d)(1)]

iv) For systems using automatic zero adjustments, the optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4% opacity.

[40 CFR 60.13(d)(1)]

(c) System Checks

A method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam to provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly shall be used by the Permittee.

[40 CFR 60.13(d)(2)]

(d) Minimum Frequency of Operation

Except during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments, the Continuous Opacity Monitoring System (COMS) shall be in continuous operation and shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

[40 CFR 60.13(e)(1)]

(e) Data Reduction and Missing Data [40 CFR 60.13(h)]

i) Permittee shall reduce all data from the COMS to 6-minute averages. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.

ii) Data recorded during periods of system breakdowns, repairs,

calibration checks, and zero and span adjustments shall not be included in the data averages computed under the previous paragraph. An arithmetic or integrated average of all data may be used.

2. Monitoring for Particulate Matter

[A.A.C. R18-2-306.A.3.b]

- a. Permittee shall evaluate opacity measurements from the COMS on a 24-hr rolling average excluding periods of startup, shutdown, and malfunction. If the 24-hr rolling average opacity exceeds 15 percent, permittee shall initiate investigation of the control equipment within 24 hours for possible corrective action. If corrective action is required, permittee shall proceed to implement such corrective action as soon as practicable in order to minimize possible exceedances of opacity and/or particulate standard established in Paragraphs I.A.1 and I.A.2 of this Attachment.
- b. A 24-hr rolling average of the opacity above 15% does not in itself constitute a violation of either the opacity or the particulate standard nor is it implied that an opacity measurement and a particulate matter correlation exists.
- c. Permittee shall log in ink or electronic format and maintain a record of 24-hr opacity measurements performed in accordance with paragraph (a) above and any corrective actions taken. A record of corrective actions taken shall include recording the date and time of the event and the date and time corrective action, if any, is completed.

3. Excess Emissions and Monitoring System Performance (MSP) Reports

- a. Excess emission and monitoring system performance (MSP) reports for Units 1 and 2 shall be submitted to the Department and EPA Region IX for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and MSP report shall include the information required in III.D.3.c. Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows: [40 CFR 60.45(g)]

(1) Opacity

Excess emissions for Units 1 and 2 are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.

[40 CFR 60.45(g)(1)]

(2) Particulate Matter

Excess emissions for Units 1 and 2 are defined as any average of three one-hour manual source tests during which the average emissions particulate matter exceeds the applicable standard in Section I.A.2 of this permit.

[40 CFR 60.8(f) and Operating Permit #0365-95, Attachment B, Condition II.F.2]

(3) Sulfur Dioxide

Excess emissions for Units 1 and 2 are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceeds the applicable



standard in Section I.A.3 of this Attachment.

[40 CFR 60.45(g)(2)]

(4) Nitrogen Oxides

Excess emissions for Units 1 and 2 using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards in Section I.A.4 of this Attachment.

[40 CFR 60.45(g)(3)]

- b. The summary quarterly report form submission required in paragraph III.D.3.a above shall be in the format specified in 40 CFR 60.7(d). The excess emissions report shall include the following information:

[40 CFR 60.7(c)]

- (1) The magnitude of excess emissions computed, any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

- c. In addition to 3.a and 3.b above, Permittee shall report emissions exceeding an emission limitation or standard as deviations in accordance with Section XII.B of Attachment "A" of this permit.

[A.A.C. R18-2-306.A.5.b]

**F. Auxiliary Boiler**

1. Permittee shall report all six-minute periods in which the opacity of any plume or effluent exceeds 15 percent from the auxiliary boiler.

[A.A.C. R18-2-724.J]

2. Opacity

- a. Permittee shall monitor opacity according to the following schedule:

- (1) If liquid fuel is combusted in the unit continuously for a time period greater than 48 hours but less than 168 hours, at least one opacity reading will be observed at the exit of the unit's stack.
- (2) If liquid fuel is combusted in the unit continuously for a time period greater than 168 hours, at least one opacity reading will be observed during each 168 hour period at the exit of the unit's stack.

- b. All opacity readings will be observed in accordance with EPA Reference Method 9. Permittee shall log in ink or in an electronic format and maintain a record of the opacity readings from above and the number of hours fuel oil is burned continuously.

3. Particulate Matter and Sulfur Dioxide

- a. Permittee shall keep on record the contractual agreement with the liquid fuel vendor indicating the following information concerning the liquid fuel being fired for each shipment of fuel oil:

- (1) The name of the fuel oil supplier;
- (2) The heating value of the fuel oil;
- (3) The density of the fuel oil;
- (4) The ash content of the fuel oil;
- (5) The sulfur content of the fuel oil from which the shipment came;
- (6) The method used to determine the ash content of the fuel oil; and
- (7) The method used to determine the sulfur content of the fuel oil.

[A.A.C. R18-2-306.A.3.b]

- b. Permittee shall maintain records of all emissions calculations performed for any change in (2), (3), or (5) above using the following equation:

$$\text{SO}_2 \text{ (lb/MMBtu)} = \frac{2.0 \times (\text{Weight percent of sulfur}/100) \times \text{Density (lb/gal)}}{[\text{Heating value (Btu/gal)}] \times (1 \text{ MMBtu}/1,000,000 \text{ Btu})}$$

[A.A.C. R18-2-306.A.3.b]

4. Dates and Hours of Operation

Permittee shall record the dates and hours of operation of the auxiliary boiler. Permittee shall submit the dates and hours of operation of the auxiliary boiler for the period of each compliance certification.

**G. Coal Handling**

1. Opacity

[A.A.C. R18-2-306.A.3.b]

- a. A certified Method 9 observer shall conduct a weekly visual survey of visible emissions from the coal preparation plant when it is in operation. This weekly survey shall include observation of all exposed transfer points, enclosed transfer points, the coal storage pile, and baghouses. Permittee shall record the name of the observer, the date the observation was made, and the results of the observation.
- b. If the observer sees a plume from an emission point that on an instantaneous basis appears to exceed 40% opacity, the observer shall, if possible, take a six-minute Method 9 observation of the plume.
- c. If the six-minute opacity of the plume exceeds 40%, Permittee shall do the following:
  - (1) Adjust or repair the controls or equipment to reduce opacity to below 40%; and
  - (2) Report it as an excess emission in accordance with Section XII.A of Attachment A of this permit.

- d. If the six-minute opacity of the plume is less than 40%, the observer shall make a record of the following:
  - (1) Date and time of the test; and
  - (2) The results of the Method 9 observation.

2. Particulate Matter

- a. Permittee shall maintain and operate the eleven baghouses in accordance with the manufacturer's specifications. These specifications shall be on file and shall be readily available for inspection by the Department.
- b. Permittee shall maintain records of emissions related maintenance performed on the baghouses. [A.A.C. R18-2-306.A.3.b]

**H. Limestone Handling**

1. Opacity

- a. A certified Method 9 observer shall conduct a weekly visual survey of visible emissions from the limestone handling system when it is in operation. This weekly observation shall include observation of all exposed transfer points, enclosed transfer points, and the baghouse. Permittee shall record the name of the observer, the date the observation was made, and the results of the observation.
- b. If the observer sees a plume from an emission point that on an instantaneous basis appears to exceed 40% opacity, the observer shall, if possible, take a six-minute Method 9 observation of the plume.
- c. If the six-minute opacity of the plume exceeds 40%, Permittee shall do the following:
  - (1) Adjust or repair the controls or equipment to reduce opacity to below 40%; and
  - (2) Report it as an excess emission in accordance with Section XII.A of Attachment A of this permit.
- d. If the six-minute opacity of the plume is less than 40%, the observer shall make a record of the following:
  - (1) Date and time of the test; and
  - (2) The results of the Method 9 observation.

2. Particulate Matter

- a. Permittee shall maintain and operate the Johnson March baghouse in accordance with the manufacturer's specifications. These specifications shall be on file and shall be readily available for inspection by the Department.
- b. Permittee shall maintain records of emissions related maintenance performed on the baghouse. [A.A.C. R18-2-306.A.2]

3. Permittee shall install, calibrate, maintain and operate monitoring devices which can be used to

determine daily the process weight of limestone produced. The weighing devices shall have an accuracy of +/- 5 percent over their operating range. [A.A.C. R18-2-722.F]

4. Permittee shall maintain a record of daily production rates of limestone produced. [A.A.C. R18-2-722.G]

## **I. Fly Ash Handling**

1. Opacity [A.A.C. R18-2-306.A.3.b]
  - a. A certified Method 9 observer shall conduct a weekly visual survey of visible emissions from the fly ash handling system when it is in operation. This weekly observation shall include observation of all exposed transfer points, enclosed transfer points, the baghouses, and the mixer unloader. Permittee shall record the name of the observer, the date the observation was made, and the results of the observation.
  - b. If the observer sees a plume from an emission point that on an instantaneous basis appears to exceed 40% opacity, the observer shall, if possible, take a six-minute Method 9 observation of the plume.
  - c. If the six-minute opacity of the plume exceeds 40%, Permittee shall do the following:
    - (1) Adjust or repair the controls or equipment to reduce opacity to below 40%; and
    - (2) Report it as an excess emission in accordance with Section XII.A of Attachment A of this permit.
  - d. If the six-minute opacity of the plume is less than 40%, the observer shall make a record of the following:
    - (1) Date and time of the test; and
    - (2) The results of the Method 9 observation.
2. Particulate Matter
  - a. Permittee shall maintain and operate the eleven baghouses, water spray header, pugmill and mixer unloader in accordance with the manufacturer's specifications. These specifications shall be on file and shall be readily available for inspection by the Department.
  - b. Permittee shall maintain records of emissions related maintenance performed on the baghouses and mixer unloader.

[A.A.C. R18-2-306.A.3.b]

## **J. Non-Point Sources**

[A.A.C. R18-2-306.A.3.b]

1. Open Areas, Roadways & Streets, Storage Piles, and Material Handling

Permittee shall maintain records of the dates on which any of the activities listed in I.H.1.b.(1) through (9) of this Attachment were performed and control measures employed.

2. Open Burning

The recordkeeping requirements for I.G.2 of this Attachment may be complied with by maintaining

copies of all open burning permits on file.

#### **K. Other Periodic Activities**

[A.A.C. R18-2-306.A.3.b]

##### **1. Abrasive Blasting**

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

- a. The date the project was conducted;
- b. The duration of the project; and
- c. Type of control measures employed.

##### **2. Use of Paints**

a. Each time a spray painting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

- (1) The date the project was conducted;
- (2) The duration of the project;
- (3) Type of control measures employed; and
- (4) Material Safety Data Sheets for all paints and solvents used in the project.

b. Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of part a. above.

##### **3. Mobile Sources**

Permittee shall keep a record of all emissions related maintenance activities performed on Permittee's mobile sources stationed at the facility as per manufacturer's specifications.

##### **4. Demolition/Renovation**

Permittee shall keep all required records in a file. The required records include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

##### **5. Nonvehicle Air Conditioner Maintenance and/or Services**

Permittee shall keep all records required by the applicable requirements of 40 CFR 82 - Subpart F in a file.

#### **IV. TESTING REQUIREMENTS**

**A.** In accordance with EPA Reference Method 9, the Method 9 reading shall be defined as an average of 24 consecutive opacity observations recorded at 15-second intervals. A set is composed of any 24 consecutive observations. Sets need not be consecutive in time and in no case shall two sets overlap. For each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24. [40 CFR 60, Appendix A, Method 9, Section 2.5]

**B.** Operations during periods of startup, shutdown, and malfunction shall not constitute representative

conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit. [40 CFR 60.8(c)]

### C. Unit 1 and Unit 2 Boilers

#### 1. Emission Rate

##### a. Using O<sub>2</sub> as Diluent Gas

The emission rate (E) of particulate matter, SO<sub>2</sub>, or NO<sub>x</sub> shall be calculated for each run using the following equation: [40 CFR 60.46(b)(1)]

$$E = C F_d (20.9)/(20.9 - \% O_2)$$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O<sub>2</sub> = oxygen concentration, percent dry basis.

F<sub>d</sub> = factor as determined from Method 19.

##### b. Using CO<sub>2</sub> as Diluent Gas

The emission rate (E) of particulate matter, SO<sub>2</sub>, or NO<sub>x</sub> shall be calculated for each run using the following equation: [40 CFR 60.46(d)(1)]

$$E = C F_d (100/\% CO_2)$$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% CO<sub>2</sub> = carbon dioxide concentration, percent dry basis.

F<sub>c</sub> = factor as determined from Method 19.

#### 2. Particulate Matter

Permittee shall perform an annual performance test to determine the particulate matter concentration using EPA Reference Method 5, 5B, or 17. [40 CFR 60.46(b)(2)]

#### 3. Sulfur Dioxide

Permittee shall perform an annual performance test to determine the sulfur dioxide concentration using EPA Reference Method 6 or 6C. [40 CFR 60.46(b)(4)]

#### 4. Nitrogen Oxides

Permittee shall perform an annual performance test to determine the nitrogen oxides concentration using EPA Reference Method 7 or 7E. [40 CFR 60.46(b)(5)]

#### 5. Opacity

Permittee shall perform an annual performance test to determine opacity using EPA Reference Method 9. [40 CFR 60.46(b)(3)]

## V. USED FUEL OIL

### A. Specifications

[A.R.S. 49-426.G.1]

Permittee may burn used oil or used oil fuel if the following conditions are met:

1. The flash point of the oil does not fall below 100E F;
2. The oil does not have following contaminants in excess of the following levels:
  - a. Arsenic 5 ppm
  - b. Cadmium 2 ppm
  - c. Chromium 10 ppm
  - d. Lead 100 ppm
  - e. PCBs 2 ppm
3. Used oil or used oil fuel blended with virgin fuel oil does not exceed 5% of the total fuel in any fuel storage tank.

### B. Limitations

1. Permittee shall not burn Hazardous Waste or Hazardous Waste Fuel as defined by A.R.S. §49-921 at the Coronado Generating Facility.

[Operating Permit #0365-95, Attachment B, Condition VII.A]

2. The amount of used oil consumed shall not exceed 350 barrels annually. Any increase in this number must be obtained through a revision to this permit.

[A.R.S. 49-426.G.1]

### C. Recordkeeping and Reporting Requirements

[A.R.S. 49-426.G.4]

1. All tests conducted pursuant to Section V.D of this Attachment shall be documented and a report submitted to the Department along with the semi-annual compliance certification.
2. Permittee shall maintain such records as required to document the use of the above fuel including the following:
  - a. Dates on which used oil or used oil fuel was burned;
  - b. Hours of usage of the used oil or used oil fuel; and
  - c. The quantity of used oil or used oil fuel burned.

### D. Testing

[A.R.S. 49-426.G.2]

1. All used oil or used oil fuel samples shall be tested prior to burning for chlorinated solvents by EPA Method 9077.
2. A representative sample from each source of used oil or used oil fuel shall be tested annually for Arsenic, Cadmium, Chromium, and Lead using approved EPA methods prior to burning.

## **ATTACHMENT "C": APPLICABLE REQUIREMENTS**

### **Air Quality Control Permit No. 1000106 For *Salt River Project - Coronado Generating Station***

#### **REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE**

Except for Acid Rain Provisions, compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

#### **ARIZONA ADMINISTRATIVE CODE (A.A.C.) TITLE 18, Chapter 2**

##### **ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES**

R18-2-601	General
R18-2-602	Unlawful Open Burning
R18-2-604	Open Areas, Dry Washes, or Riverbeds
R18-2-605	Roadways and Streets
R18-2-606	Material Handling
R18-2-607	Storage Piles
R18-2-610	Evaluation of Nonpoint Source Emissions

##### **ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS**

R18-2-702.B	General Provisions
R18-2-716.B.2	Standards of Performance for Existing Coal Preparation Plants
R18-2-716.D	Standards of Performance for Existing Coal Preparation Plants
R18-2-722.B.2	Standards of Performance for Existing Gravel or Crushed Stone Processing Plants
R18-2-722.D	Standards of Performance for Existing Gravel or Crushed Stone Processing Plants
R18-2-722.F	Standards of Performance for Existing Gravel or Crushed Stone Processing Plants
R18-2-722.G	Standards of Performance for Existing Gravel or Crushed Stone Processing Plants
R18-2-724.B	Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment
R18-2-724.C.1	Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment
R18-2-724.E	Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment
R18-2-724.G	Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment
R18-2-724.J	Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment
R18-2-726	Standards of Performance for Sandblasting Operations
R18-2-727	Standards of Performance for Spray Painting Operations
SIP R9-2-527.C	Standards of Performance for Spray Painting Operations
R18-2-730.A	Standards of Performance for Unclassified Sources
R18-2-730.B	Standards of Performance for Unclassified Sources
R18-2-730.D	Standards of Performance for Unclassified Sources
R18-2-730.F	Standards of Performance for Unclassified Sources
R18-2-730.G	Standards of Performance for Unclassified Sources



**ATTACHMENT "C": APPLICABLE REQUIREMENTS (Cont' d)**

**ARTICLE 8. EMISSIONS FROM MOBILE SOURCES (NEW AND EXISTING)**

R18-2-801 Classification of Mobile Sources  
R18-2-804 Roadway and Site Cleaning Machinery

**ARTICLE 9. NEW SOURCE PERFORMANCE STANDARDS**

R18-2-901.2 40 CFR 60, Subpart D, Electric Utility Steam Generating Units for which Construction is Commenced  
After August 17, 1971  
R18-2-903.1 Standards of Performance for Fossil-fuel Fired Steam Generators  
R18-2-903.2 Standards of Performance for Fossil-fuel Fired Steam Generators

**ARTICLE 11. FEDERAL HAZARDOUS AIR POLLUTANTS**

R18-2-1101.A.8 National Emission Standards for Hazardous Air Pollutants (NESHAPs), (by reference) 40 CFR 61,  
Subpart M - Asbestos

**ARIZONA REVISED STATUTES (A.R.S.), CHAPTER 3, ARTICLE 2**

49-426.G Permits; duties of director; exceptions; applications; objections; fees (State Requirement)

**NEW SOURCE PERFORMANCE STANDARDS - 40 CFR 60 Subpart A**

40 CFR 60.7(c) Subpart A - General Provisions  
40 CFR 60.7(f) Subpart A - General Provisions  
40 CFR 60.8(c) Subpart A - General Provisions  
40 CFR 60.11(c) Subpart A - General Provisions  
40 CFR 60.11(d) Subpart A - General Provisions  
40 CFR 60.11(e) Subpart A - General Provisions  
40 CFR 60.13(a) Subpart A - General Provisions  
40 CFR 60.13(d)(1) Subpart A - General Provisions  
40 CFR 60.13(d)(2) Subpart A - General Provisions  
40 CFR 60.13(e)(1) Subpart A - General Provisions  
40 CFR 60.13(h) Subpart A - General Provisions

**ACCIDENTAL RELEASE PREVENTION PROGRAM**

40 CFR 68 Chemical Accident Prevention Provisions

**STRATOSPHERIC OZONE PROTECTION**

40 CFR 82 Subpart F - Recycling and Reducing Emissions

**ACID RAIN PROVISIONS**

40 CFR 72 Permits Regulation  
40 CFR 73 Sulfur Dioxide Allowance System  
40 CFR 74 Sulfur Dioxide Opt-ins  
40 CFR 75 Continuous Emission Monitoring  
40 CFR 76 Acid Rain Nitrogen Oxides Emission Reduction Program

## ATTACHMENT "D": EQUIPMENT LIST

Air Quality Control Permit No. 1000106  
For  
*Salt River Project - Coronado Generating Station*

Permitted Equipment					
Equipment ID	Description	Size	Serial Number	Model	Date of Commercial Operation
Unit 1	Steam electric generating unit	4719 MMBtu/hr	7153	Riley Stoker Corporation	1977
Unit 2	Steam electric generating unit	4719 MMBtu/hr	7188	Riley Stoker Corporation	1977
Auxiliary Boiler	Auxiliary boiler steam for startup	157 MMBtu/hr	37129857	Combustion Engineering	1977
Cooling Tower 1	Steam unit cooling tower	179,900 gpm	Unit 1	Marley Company 664-4-14	1977
Cooling Tower 2	Steam unit cooling tower	179,900 gpm	Unit 2	Marley Company 664-4-14	1977
Coal Handling	Screens, ball mills, Crushers, silos, and conveyors	3000 tph	--	--	1977
Limestone Handling	Storage bin, ball mill, and conveyors	30 tph	--	--	1977
Fly Ash Handling	Storage silos	200 tph	--	--	1977
Nonpoint Sources	--	--	--	--	--
Sand Blasting	--	--	--	--	--
Spray Painting	--	--	--	--	--
Mobile Sources	--	--	--	--	--
Demolition and Renovation	--	--	--	--	--
Air Conditioner Maintenance and Service	--	--	--	--	--

## ATTACHMENT “D”: EQUIPMENT LIST (Cont’ d.)

### Continuous Emission Monitors

Steam Unit	NO <sub>x</sub> Monitor	SO <sub>2</sub> Monitor	CO <sub>2</sub> Monitor	Opacity Monitor	Flow Monitor
Unit 1	OP SIS/ABB Model AR620- ER070 Serial #285	OP SIS/ABB Model AR620- ER070 Serial #285	OP SIS/ABB Model AR620- ER070 Serial #285	Lear Siegler Model RM41 Serial #1384	Panametrics Model CEM68-29- 2201-0 Serial #225
Unit 2	OP SIS/ABB Model AR620- ER070 Serial #286	OP SIS/ABB Model AR620- ER070 Serial #286	OP SIS/ABB Model AR620- ER070 Serial #286	Lear Siegler Model RM41 Serial #781049	US Ultraflow Model 100 Serial #224

### Air Pollution Control Equipment

Operation	Description	Size	Serial Number	Model	Date of Commercial Operation
Primary Steam Generation	4 Hot Side Electrostatic Precipitators Hot Side for Steam Units 1 and 2	2,800,000 acfm	10507-C-450 <sup>1</sup>	Joy-Western	1977
Primary Steam Generation	4 Sulfur Dioxide Scrubbers	378,000 scfm	10507-C-454 <sup>1</sup>	Pullman Kellog	1977
Coal Handling System	Sampling Building Dust Collector (DC-1)	7,200 cfm @ 70 °F	HTC7-10 <sup>2</sup>	Johnson March	1977
Coal Handling System	Crusher House Dust Collector (DC-2)	16,200 cfm @ 70 °F	STH 13-11 <sup>2</sup>	Johnson March	1977
Coal Handling System	Transfer Area Unit 1 Dust Collector (DC-3)	18,000 cfm @ 70 °F	STH 13-12 <sup>2</sup>	Johnson March	1977
Coal Handling System	Transfer Area Unit 2 Dust Collector (DC-4)	12,000 cfm @ 70 °F	STH 13-8 <sup>2</sup>	Johnson March	1977

## ATTACHMENT “D”: EQUIPMENT LIST (Cont’ d.)

Operation	Description	Size	Serial Number	Model	Date of Commercial Operation
Coal Handling System	Unit 1 Silos and Unit 2 Silos Dust Collector (DC-5)	2,000 cfm @ 70 °F	HTC 3-8 13-11 <sup>2</sup>	Johnson March	1977
Coal Handling System	Coal Unloading and Storage Area	--	10507-C-451 <sup>1</sup>	FMC	1977
Coal Mixing System	Sample Building Extension Dust Collector/Hopper	--	H-10952 <sup>3</sup>	Johnson March	1977
Fly Ash System	Bin Dust Collectors	2,375 cfm	84-WRW -96 (III)	Flex-Kleen	1977
Fly Ash System	Receiving Silos Dust Collector	7,350 cfm	U300018DC1	Johnson March	1999
Limestone Handling System	Ball Mill Dust Collector	7,000 cfm @ 70 °F	10507-C-482 <sup>1</sup>	Johnson March	1977

<sup>1</sup> Purchase Order Number

<sup>2</sup> Model Number

<sup>3</sup> Specification Number

## ATTACHMENT "E": INSIGNIFICANT ACTIVITIES

**Air Quality Control Permit No. 1000106**  
**For**  
***Salt River Project - Coronado Generating Station***

S. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
1	5,000 gallon sulfuric acid storage tank (93%) (4)
2	7,000 gallon sodium hydroxide storage tank (50%)
3	5,000 gallon copper corrosion inhibitor storage tank (50% water solution of sodium tolytriazole)
4	3,000 gallon coagulant storage tanks (aqueous sodium aluminate solution) (2)
5	5,000 gallon antiscalant/dispersant storage tank (aqueous solution of sodium phosphonate and polyacrylates)
6	2,000 lb pH control/hardness conditioning storage tank (phosphates) and 400 gallon morpholine
7	400 gallon oxygen scavenger storage tank (aqueous modified amino compound)
8	1250 gallon corrosion inhibitor (aqueous solution of borate, nitrate and nitrite)
9	15,000 gallon vehicle diesel fuel storage tank (2)
10	1,000,000 gallon fuel oil storage tank (#2 diesel fuel)
11	10,000 gallon unleaded gasoline storage tank (2)
12	10 nitrogen cylinders at 7500 scf each
13	15 hydrogen cylinders at 7500 scf each
14	Two 16,000 gallon turbine lube oil storage tank
15	550 gallon hydraulic oil HD 100 storage tank (2)
16	550 gallon AW machine oil 150 storage tank (2)
17	550 gallon AW machine oil 68 storage tank (2)
18	550 gallon AW machine oil 32 storage tank (2)
19	550 gallon fyrquel hydraulic fluid storage tank (2)
20	550 gallon ethylene glycol storage tank (2)
21	550 gallon almasol gear lube 90 weight storage tank (2)

S. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
22	mineral oil storage tank
23	boiler feed pump
24	50,000 gallon bearing cooling water (2)
25	15,000 gallon brine sump
26	800 hp emergency diesel engine
27	miscellaneous steam vents
28	Quality control/assurance laboratory
29	Drum storage and handling
30	Boiler feedwater water treatment and storage
31	Process water treatment and storage
32	On-site domestic wastewater and sewage treatment (10,000 gal/day)
33	Housekeeping activities and associated cleaning products
34	Heating ventilation & air conditioning equipment not designed to remove air contaminants
35	General office activities
36	Restroom facilities and associated cleanup operations and vents
37	Vacuum cleaning systems used exclusively for commercial/industrial purposes
38	Landscaping and site housekeeping activities
39	Fugitive emissions from landscaping activities
40	Use of pesticides, fumigants, and herbicides
41	Groundskeeping activities and products
42	Flares used to indicate danger
43	Cindering of streets and roads to abate traffic hazards caused by ice and snow
44	Equipment using water, water and soap or detergent, or a suspension of abrasives in water for the purposes of cleaning or finishing
45	Activities directly used in the diagnosis and treatment of injury or other medical condition
46	Manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or tuming, and associated venting

S. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
47	Brazing, soldering, or welding operations
48	Battery recharging areas
49	Aerosol can usage
50	Plastic pipe welding
51	Acetylene, butane and propane torches and their use
52	Steam vents, condenser vents, and boiler blowdown
53	Equipment used exclusively for portable steam cleaning
54	Blast cleaning equipment using a suspension of abrasives in water and any exhaust system or collector serving them exclusively
55	Pump/motor oil reservoirs
56	Transformer vents
57	Lubricating system reservoirs
58	Hydraulic system reservoirs
59	Adhesive use not related to production
60	Caulking operations not part of production process
61	Electric motors
62	High voltage induced corona
63	Safety devices such as fire extinguishers
64	Soil gas sampling
65	Filter draining
66	General vehicle maintenance and servicing activities
67	Station transformers
68	Circuit breakers
69	Storage cabinets for flammable products

## ATTACHMENT "F": PHASE II ACID RAIN PROVISIONS

### Air Quality Control Permit No. 1000106 For *Salt River Project - Coronado Generating Station*

#### I. Statement of Basis

Statutory and Regulatory Authorities: In accordance with Arizona Revised Statutes, Title 49, Chapter 3, Article 2, Section 426.N, and Titles IV and V of the Clean Air Act, the Arizona Department of Environmental Quality issues this Phase II Acid Rain Permit pursuant to Arizona Administrative Code, Title 18, Chapter 2, Article 3, Section 333 ( A.A.C. R18-2-333), "Acid Rain".

#### II. SO<sub>2</sub> Allowance<sup>†</sup> Allocations and NO<sub>x</sub> Requirements for Each Affected Unit

		1998	1999	2000	2001	2002	2003	2004
<b>Unit 1</b>	SO <sub>2</sub> allowances under Tables 2, 3, or 4 of 40 CFR part 73	NA	NA	5690*	5690*	5690*	5690*	5690*
	NO <sub>x</sub> limit	<p>Pursuant to 40 CFR 76.8(d)(2), Arizona Department of Environmental Quality approves a NO<sub>x</sub> early election compliance plan for Unit 1. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, the unit's annual average NO<sub>x</sub> emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for wall fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.46 lb/MMBtu until calendar year 2008.</p> <p>In addition to the described NO<sub>x</sub> compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for NO<sub>x</sub> compliance plan and requirements covering excess emissions.</p>						



		1998	1999	2000	2001	2002	2003	2004
<b>Unit 2</b>	SO <sub>2</sub> allowances under Tables 2, 3, or 4 of 40 CFR part 73	NA	NA	5856*	5856*	5856*	5856*	5856*
	NO <sub>x</sub> limit	<p>Pursuant to 40 CFR 76.8(d)(2), Arizona Department of Environmental Quality approves a NO<sub>x</sub> early election compliance plan for Unit 2. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, the unit's annual average NO<sub>x</sub> emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for wall fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.46 lb/MMBtu until calendar year 2008.</p> <p>In addition to the described NO<sub>x</sub> compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for NO<sub>x</sub> compliance plan and requirements covering excess emissions.</p>						

† As defined under 40 CFR §72.2, "Allowance" means an authorization by the Administrator under the Acid Rain Program to emit up to one ton of sulfur dioxide during or after a specified calendar year.

\* The number of allowances allocated to Phase II affected units by U.S. EPA may change in a 1998 revision to 40 CFR part 73 Tables 2, 3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit (See 40 CFR 72.84).

### III. Comments, Notes and Justifications

SRP has early-elected for NO<sub>x</sub> requirements on Units 1 and 2.

### IV. Permit Application

The Permittee, and any other owners or operators of the units at this facility, shall comply with the requirements contained in the attached acid rain permit application (OMB No. 2060-0258) signed by the Designated Representative Nils I. Larson on 12/11/95.